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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|--------------------------------|------------------------|
| 10/666,699 | 09/19/2003 | Bjorn Bjare | P17466US2 | 1996 |
| 27045 | 7590 | 12/11/2007 | | |
| ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024 | | | EXAMINER VERDI, KIMBLEANN C | |
| | | | ART UNIT 2194 | PAPER NUMBER |
| | | | MAIL DATE 12/11/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/666,699

Applicant(s)

BJARE ET AL.

Examiner

KimbleAnn Verdi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9-12, 14-21 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-12, 14-21 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This office action is in response to the Amendment filed on September 24, 2007. Claims 1-7, 9-12, 14-21, and 23 are pending in the current application. All previously outstanding objections and rejections to the Applicant's disclosure and claims not contained in this Action have been respectfully withdrawn by the Examiner hereto.

Response to Amendment

1. Amendment to the drawings and specification overcomes the previous objections to the drawings.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 10, and 15 have been considered but are moot in view of the new ground(s) of rejection.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: reference character 52, "DSP", Fig. 2, is not disclosed in specification.
4. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37

CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-9 and 15-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

With respect to claims 1-9, a “computer system having computer software loadable into a memory and executable by computer hardware” is being recited; however, it appears that a computer system having computer software loadable into a memory and executable by computer hardware would reasonably be interpreted by one of ordinary skill in the art as software, per se. A computer system having computer software loadable into a memory and executable by computer hardware as claimed contains an intended use statement and does not set forth a means to realize the software, per se such as including computer hardware in the structure of the computer system. As such, it is believed that a computer system having computer software loadable into a memory and executable by computer hardware of claims 11-16 is reasonably interpreted as functional descriptive material, per se. Examiner suggests including the computer hardware in the claim.

With respect to claims 15-23, a “message transmitting mechanism of a computer having computer software loadable into a memory and executable by computer

hardware” is being recited; however, it appears that a message transmitting mechanism of a computer having computer software loadable into a memory and executable by computer hardware would reasonably be interpreted by one of ordinary skill in the art as software, per se. A message transmitting mechanism of a computer having computer software loadable into a memory and executable by computer hardware as claimed contains an intended use statement and does not set forth a means to realize the software, per se such as including computer hardware in the structure of the message transmitting mechanism. As such, it is believed that a message transmitting mechanism of a computer having computer software loadable into a memory and executable by computer hardware of claims 11-16 is reasonably interpreted as functional descriptive material, per se. Examiner suggests including the computer hardware in the claim.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 6, 7, 10-12, 15-16, and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 2003/0037174 A1 to Lavin et al. (hereinafter Lavin) in view of United States Patent 6,532,498 B1 to Hager et al. (hereinafter Hager).

9. As to claim 1, Lavin teaches the invention substantially as claimed including a computer system having computer software loadable into a memory and executable by computer hardware, said computer software comprising code for transmitting messages

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between a platform domain (middleware software, paragraph [0011]) and an application domain (application A 108, application B 110, application C 112, and application D, 114, Fig. 1 are part of the application domain, paragraph [0011]) for a product, the system comprising:

a platform domain having a software component (message broker, 116, Fig. 2) and an interface component (adapter 118, Fig. 2), the interface component having at least one interface (plug 140, Fig. 5) for providing an application or a module in the application domain (application, 108, 110, 112, and 114 Fig. 5) with access to the software component (message broker, 116, Fig. 5), and a message transmitting mechanism (socket 136, Fig. 5, paragraph [0076]) for transmitting messages between the platform domain and the application domain via the interface (socket 136, maps the SDK's 130 interface 132 to the plug's 140 interface defined in socket/plug interface 146, Fig. 5, translation of data performed in socket domain, paragraph [0076]);

Although Lavin teaches the invention substantially, Lavin does not specifically disclose

the message transmitting mechanism including:

a message model for allowing an application or another module in the application domain to select or switch between either a callback mode or a full message mode for receiving messages from the platform domain, wherein the application or the module in the application domain may change or switch between the callback mode and the full message mode at any time; and

a message handler for routing messaging according to the selected mode.

However Hager teaches the message transmitting mechanism including:

a message model for allowing an application or another module in the application domain to select or switch between either a callback mode or a full message mode for receiving messages from the platform domain (col. 6, lines 7-11 and Figure 6), wherein the application or the module in the application domain may change or switch between the callback mode and the full message mode at any time (col. 6, lines 27-42); and

a message handler for routing messaging according to the selected mode (Dispatcher 2g, Fig. 6, col. 6, lines 7-11).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the message broker of Lavin with the teachings of dispatcher from Hager because this feature would have provided a mechanism for a callback object 2a, and a poll object 6c representing two types of dispatches available (col. 6, lines 7-10 and Figure 6 of Hager).

10. As to claim 6, Lavin as modified teaches the computer system according to claim 1, wherein, if the callback mode is selected (Figure 7, col. 6, lines 12-18 of Hager), the callback mode is entered by the application returning execution control to the message handler after the invocation of a callback function/procedure/method (Figure 7, col. 6, lines 12-18 of Hager).

11. As to claim 7, Lavin as modified teaches the computer system according to claim 1, wherein if the full message mode is selected messages (col. 6, lines 19-25 and Figures 11-13 of Hager), the full message mode is entered by the application keeping the execution control after the invocation of a callback function/procedure/method and

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polling the message handler for queued messages (col. 6, lines 19-25 and Figures 11-13 of Hager).

12. As to claim 10, this claim is rejected for the same reasons as claim 1 since claim 10 recites the same or equivalent invention, see the rejection to claim 1 above.

13. As to claims 11-12, these claims are rejected for the same reasons as claims 6-7 respectively, since claims 11-12 recite the same or equivalent invention, see the rejections to claims 6-7 above.

14. As to claim 15, this claim is rejected for the same reasons as claim 1 since claim 15 recites the same or equivalent invention, see the rejection to claim 1 above.

15. As to claim 16, this claim is rejected for the same reasons as claim 1 since claim 16 recites the same or equivalent invention, see the rejection to claim 1 above.

16. As to claims 20-21, these claims are rejected for the same reasons as claims 6-7 respectively, since claims 20-21 recite the same or equivalent invention, see the rejections to claims 6-7 above.

17. Claims 2-5, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 2003/0037174 A1 to Lavin et al. (hereinafter Lavin) in view of U.S. Patent 6,804,818 B1 to Codella et al. (hereinafter Codella).

18. As to claim 2, Lavin does not explicitly teach wherein the message handler is included in the platform domain.

However Codella teaches wherein the message handler (message proxy, 104, Fig. 1 of Codella) is included in the platform domain (col. 3, lines 47-53 and col. 4, lines 31-32 of Codella).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the adapter of Lavin with the teachings of a message model and handler from Codella because these features would have provided a unified component model for middleware integration and a mechanism for easy implementation of anonymous invocations (e.g. request for service) (col. 2 lines 6-10 of Codella).

19. As to claim 3, Lavin as modified by Codella teaches the computer system according to claim 2 wherein:

the interface (adapter 118, Fig. 2 of Lavin) comprises a middleware services layer (adapter is part of middleware software which connects message broker and application, paragraph [0012] and message bean handles request for service (anonymous invocation) between middleware software (e.g. middleware software) paragraph [0011] of Lavin) (col. 3, lines 47-53 and col. 4, lines 31-32 of Codella); and

the message handler (message proxy, 104, Fig. 1 of Codella) comprises a Native Application Core module (message bean is Enterprise Java™ Bean (e.g. message proxy is implemented in Java™), col. 4, lines 28-30 of Codella) that acts as a router (message proxy 104, creates instance of the result proxy 116, Fig. 1, col. 15, lines 19-20, which identifies type of reply and performs synchronous and asynchronous send for message bean, col. 15, lines 11-16 of Codella) included in the middleware services layer (message bean (message proxy 104, component of message bean, Fig. 1) handles request for service (anonymous invocation) between middleware software, col. 3, lines 47-53 and col. 4, lines 31-32 of Codella).

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20. As to claim 4, Lavin as modified by Codella teaches the computer system according to claim 3, wherein the Native Application Core module (message bean is Enterprise Java™ Bean (e.g. message proxy is implemented in Java™), col. 4, lines 28-30 of Codella) is included in an Open Platform API (OPA) (e.g. enterprise Java™ of Codella) domain of the middleware services layer (message bean uses bean-managed messaging which is an EJB (Enterprise Java™ Bean) that uses the JMS application programming interface (API), lines 53-56, JMS provides unified view of commercial messaging systems (e.g. can be used with any message broker system), and any server that supports enterprise Java™, e.g., EJS, can support message bean, col. 20, lines 9-17 of Codella).

21. As to claim 5, Lavin as modified by Codella teaches the computer system according to claim 1, wherein support for the message model is included in the platform domain (message bean (message proxy 104, component of message bean, Fig. 1) handles request for service (anonymous invocation) between middleware software, col. 3, lines 47-53 and col. 4, lines 31-32 of Codella) and controlled by the modules in the application domain (receives anonymous invocations from the message-oriented applications, col. 9, lines 4-10 of Codella).

22. As to claims 17-19, these claims are rejected for the same reasons as claims 3-5 respectively, since claims 17-19 recite the same or equivalent invention, see the rejections to claims 3-5 above.

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23. Claims 9, 14, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 2003/0037174 A1 to Lavin et al. (hereinafter Lavin) in view of U.S. Patent Application 2005/0114517 A1 to Maffeis.

24. As to claim 9, Lavin does not explicitly teach wherein the platform domain comprises a platform for a mobile terminal for a wireless telecommunications system.

However Maffeis teaches wherein the platform domain comprises a platform for a mobile terminal for a wireless telecommunications system.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the middleware software of Lavin with the teachings of message proxy infrastructure from Maffeis because this feature would have provided a mechanism to send and receive message to and from mobile devices, over any wireless transport protocol (paragraph [0011] of Maffeis).

25. As to claim 14, this claim is rejected for the same reasons as claim 9 since claim 14 recites the same or equivalent invention, see the rejection to claim 9 above.

26. As to claim 23, this claim is rejected for the same reasons as claim 9 since claim 23 recites the same or equivalent invention, see the rejection to claim 9 above.

Conclusion

27. The prior art made of record on the accompanying PTO-892 and not relied upon, is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KimbleAnn Verdi whose telephone number is (571) 270-1654. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KV

December 10, 2007


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER